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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,401	07/26/2001	Jose Kolencheril Raphael	1763.0140000	4249

26111 7590 09/21/2005

STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

BLENMAN, AVALON

ART UNIT PAPER NUMBER

2153

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,401

Applicant(s)

RAPHEL ET AL.

Examiner

Avalon Blenman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 1 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

[Handwritten signature]

DETAILED ACTION

1. This office action is a first action on the merits of this application and is made **NON-FINAL**. Claims 1-13 are currently pending, of which 1 & 8 are independent claims.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted has been entered and is being considered by the examiner.

Claim Objections

3. Claims 1 & 8 are objected to because of the following informalities: It is suggested applicant insert a comma after the phrase "the response time of the server" (lines 3 & 6, respectively). Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Phaal (US 6,055,564)**.

6. In considering independent claim 1, Phaal discloses method (fig. 3) for maximizing throughput while avoiding overload of one or more servers, comprising the steps of:

- intercepting, via an interface unit (fig. 1, #125, "Admission Control Gateway"), a client request for information from the server (fig. 1, #117, "Processing Server") [col. 5, lines 54-62];
- determining, by said interface unit, the current server performance, wherein said server performance is based on one or more of: the number of active connections opened to the server ("transaction- in-progress"), the response time of the server and the rate at which said response time is changing [fig. 3, step 147, col. 8, lines 61-66];
- forwarding ("admitting") said client request to the server if said current server performance is below or within a range determined for optimal performance ("threshold"), whereby avoiding overload of the server [fig. 3, step 139, col. 8, lines 61-66, col. 6, lines 24-36]; and
- where server performance is outside such optimal range, buffering the client request until said current server performance is within the optimal range for server performance [--*"the message is sent to the deferral manager"* --, fig. 3, step 141, col. 9, lines 20-23, col. 6, lines 45-49].

7. In considering claim 2, Phaal discloses:

- said buffering utilizes a first-in-first-out method [*--the first deferred message (first-in) will have a higher priority, and this be serviced before the most recently deferred message (last-in)--*, col. 9, lines 24-46].

8. In considering claim 3, Phaal discloses:

- said buffering comprises the steps of: determining a preferred client value ("priority") for said client request; and determining the position of said client request in a queue based on a preferred client value [*--"reordering messages in message queue according to priority"--*, col. 4, lines 39-49, col. 5, lines 28-34].

9. In considering claim 4, Phaal discloses:

- said preferred client value (priority) may be partly determined by one or more of the network address (including either or both of the internet address and the port address) of said client request (*"identifier provided with packet information"*), by a header related to said client request, by previous requests from the client of said client request (*"session-in-progress"*), and by a cookie related to said client request [col. 8, lines 7-35].

10. In considering claim 5, Phaal discloses:

- multiplexing connections to the server, whereby said multiplexed connections may be reused for different client requests [col. 4, line 65 – col. 5, line 16].

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11. In considering claim 6, Phaal discloses:

- closing connections to the server as a way of reducing server load and improving server performance [col. col. 8m lines 34-40]

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Phaal**, further in view of **Takahashi et al (US 6,259,705)**.

14. In considering claim 7, while Phaal discloses determining current server performance, Phaal does not explicitly disclose an overload message form the server. Nonetheless, in analogous art of avoiding overload of one or more servers, Takahashi discloses:

- the step of determining the current server performance may further be determined by the number of pending requests sent to the server ("number of connections of data to the second control unit") and server error/overload messages from the server [fig. 12, step S913, col. 9, lines 5-23, 32-41].

Given the teachings of Takahashi, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify method of Phaal where determining the current server performance could be determined by the server error/overload message. The motivation as suggested by Takahashi would be to make appropriate adjustments to the server (i.e. increasing the number of available slots) in the event that the server becomes overloaded [col. 10, lines 25-33].

15. In considering independent claim 8, Takahashi discloses a system (fig. 2) for maximizing throughput while avoiding overload of a server, comprising:

- an interface unit (fig. 1, #125, "Admission Control Gateway") for intercepting a client request for information from the server (fig. 1, #117, "Processing Server") [col. 5, lines 54-62];
- said interface unit forwards ("admits") said client request to the server if said current server performance is below or within a range determined for optimal performance ("threshold"), whereby avoiding overload of the server [fig. 3, step 139, col. 8, lines 61-66, col. 6, lines 24-36], and
- where server performance is beyond such optimal range, wherein said interface unit buffers the client request until said current server performance is within the optimal range for server performance [-- "*the message is sent to the deferral manager*" --, fig. 3, step 141, col. 9, lines 20-23, col. 6, lines 45-49].

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While Phaal discloses these features, Phaal does not explicitly disclose an interface unit determined by the response time of the server and the rate at which the response time is changing. Nonetheless, Takahashi discloses:

- said interface unit (fig. 2, #3, "Sever Load Balancing Device") determines the current server performance ("load conditions") based on the number of connections opened to the server, the response time of the server and the rate at which said response time is changing (*can be readily derived from the average response time calculation*) [col. 1, lines 52-59, fig. 21, col. 15, lines 15-22].

16. In considering claims **9-12**, see the rejections for claims 2-5, respectively.

Conclusion


17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avalon Blenman whose telephone number is (571) 272-5864. The examiner can normally be reached on Mon-Fri, 7:00 AM - 4:30 PM (even date Mons. off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avalon Blenman
09/14/2005



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100